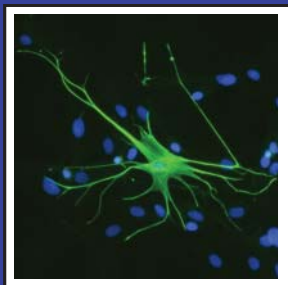


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NINDS Notes is published 3 times a year and consists of summaries of NINDS's current funding announcements and requests for volunteers for clinical trials. *Notes* is of primary importance to scientists, physicians, and research directors with an interest in neuroscience.



Human Astrocyte by
Dr. Riccardo Cassiani-Ingoni
NINDS

NINDS Notes

National Institute of Neurological Disorders and Stroke

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News & Notes

NIH Issues Blueprint Grand Challenges

The NIH Blueprint recently announced Grand Challenges to accelerate research with the potential to transform

basic understanding of the brain and approaches to treating brain disorders. The Blueprint is a framework to enhance cooperative activities among the 16 NIH Institutes, Centers, and Offices that support research on the nervous system.

The Blueprint Grand Challenges—which began in 2009 and will continue in 2010—address the Human Connectome Project, neuropathic pain, and neurotherapeutics. Funding

announcements for the Human Connectome Project and the first phase of the Grand Challenge on pain were released in 2009. NIH now has released funding announcements for the next phase of the pain challenge and for neurotherapeutics.

Neuropathic Pain

Pain conditions are a major health problem in the United States. Chronic neuropathic pain is especially difficult to treat. The Grand Challenge on pain supports research to understand the changes in the nervous system that cause acute, temporary pain to become chronic nerve pain (neuropathic pain). One goal of the initiative is to enhance collaboration between researchers in the pain field and researchers with expertise in neuroplasticity.

NIH is encouraging the submission of multi-PI grant applications that propose highly collaborative, multidisciplinary research projects addressing neuropathic pain conditions, or competitive revision applications that propose a collaborative, one-year pilot study or a new specific aim associated with an active NIH grant. The parent grant may be focused on pain or neural plasticity outside the area of pain.

Letters of intent are due by August 30, 2010; applications are due by September 29, 2010.

For more information contact Dr. John Kusiak, director, Molecular and Cellular Neuroscience Program, NIDCR, at 301-594-7984 or kusiakj@mail.nih.gov, or visit <http://grants.nih.gov/grants/guide/rfa-files/RFA-DE-11-002.html>, or <http://grants.nih.gov/grants/guide/pa-files/PA-10-204.html>.

Neurotherapeutics

Most promising compounds identified through basic research are not ready for human testing. Before a new chemical can be tested in a clinical setting, it must undergo a chemical optimization process to improve potency, activity, and drug-likeness, and pre-clinical safety testing to meet the standards set by the Food

and Drug Administration. The Neurotherapeutics Grand Challenge will set up a pipeline to move candidate drugs for neurological disorders through preclinical development into early clinical trials.

The ultimate goals of this Grand Challenge are to produce at least one novel and effective drug for a nervous system disorder that is currently poorly treated, and to increase industry interest in novel disease targets by demonstrating early-stage success.

Letters of intent are due by July 10, 2010; applications are due by August 10, 2010.

For more information contact Dr. Jill Heemskerk, program director, Office of Translational Research, NINDS, at 301-496-1779 or jh440o@nih.gov; or Dr. Rebecca Farkas, program director, Office of Translational Research, NINDS, at 301-496-9271 or rf169p@nih.gov, or visit <http://neuroscienceblueprint.nih.gov/rfa>.^{NIH}

NINDS Offers Supplements for Global Research

NINDS is offering administrative supplements to promote global health research involving training and capacity building in low-to-middle income countries. The institute has set aside 2 million dollars to award approximately 25 supplements.

The prevalence of stroke and neurodegenerative disorders is rising rapidly and is becoming a significant health burden in low- and middle-income countries. However, global health research, training, and capacity building activities in the developing world—particularly in low-income countries—is inadequate to meet the region's growing needs.

To advance global health research and to build research capacity in neurological disorders and stroke, NINDS encourages collaborations between NINDS-funded investigators and investigators from low- or middle-income countries. The goal is to strengthen existing research and research training, and to support capacity building and the sustainability of activities aimed at lessening the global impact of neurological diseases and stroke.

For more information on contact Dr. Yuan Liu, chief, Office of International Activities, NINDS, at 301-496-0012 or yl5o@nih.gov, or visit <http://grants.nih.gov/grants/guide/notice-files/NOT-NS-10-014.html> or <http://grants.nih.gov/grants/guide/notice-files/NOT-NS-10-019.html>.^{NIH}



Funding Opportunities

Assay Development for High-Throughput Molecular Screening

NIH encourages applications for assay development for high-throughput molecular screening.

This is an NIH Roadmap initiative. The NIH Roadmap is an innovative approach to accelerate fundamental discovery and translate that knowledge into effective prevention strategies and new treatments.

This announcement supports the discovery of new molecular probes for investigating biological function by funding the development and adaptation of biological assays for use in automated high-throughput screening (HTS) projects. These HTS-ready assays then can be screened by the Molecular Libraries Production Centers Network to identify biologically active compounds in a large library of small molecule chemical structures. HTS is the automated, simultaneous testing of thousands of distinct chemicals in models of biological mechanisms. The immense potential of HTS to impact the understanding of biological mechanisms is largely untapped because access to automated screening facilities and large compound libraries is limited in academic, government, and non-profit research sectors.

Application Due Date: October 29, 2010

Potential applicants should contact Dr. Mark Scheideler, program director, Office of Translational Research, NINDS, at 301-496-1779 or scheideler@ninds.nih.gov. For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-10-182.html>.

Autism and Autism Spectrum Disorders

NINDS invites applications for research on autism and autism spectrum disorders. This announcement is made together with 7 other NIH components.

Autism spectrum disorders share a cluster of impairments in reciprocal social interaction, communication, and the presence of stereotyped behavior, interests, or activities. These complex disorders are usually lifelong and affect multiple aspects of development, learning, and adaptation at home, in school, and in the community. Basic research on the pathophysiology of autism and autism spectrum disorders, including research on brain mechanisms and genetics, is of special interest. Also of high priority are clinical and applied studies that may lead to the development of diagnostic research instruments, treatments, and interventions, including complementary and alternative medicine strategies.

Potential applicants should contact Dr. Deborah Hirtz, program director, Office of Clinical Research, NINDS, at 301-496-5821 or dh83f@nih.gov. For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-10-158.html>.

Exploratory Clinical Trials

NINDS encourages applications for exploratory clinical trials.

This announcement supports proposals for exploratory clinical trials (i.e., phase I and II studies) of drugs, biologics or devices, as well as surgical, behavioral, or rehabilitation therapies, that contribute to the justification for and provide the data required to design a future trial to confirm efficacy (i.e., a phase III trial). Proposals must aim to generate data that inform a decision whether to continue further clinical development of the proposed intervention.

Application Due Date: July 14, 2010

Potential applicants should contact Peter Gilbert, clinical research project manager, Office of Clinical Research, NINDS, at 301-496-0870 or gilbertp@ninds.nih.gov. For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-10-199.html>.

Phase III Clinical Trials

NINDS invites applications for phase III investigator-initiated, multi-center clinical trials.

Phase III trials are conducted to provide definitive answers regarding the safety and efficacy of interventions. These trials are the most complex and challenging to design and implement. In addition to lengthy study start-up, slow participant enrollment can cause trial delays and result in the need for additional funding in order to complete the planned trials. Preventing trial failure due to poor planning, enrollment, and retention requires anticipatory and flexible management. The purpose of this announcement is to provide a vehicle to submit and successfully implement large, complex phase III clinical trials that include stages to allow the investigators and NINDS to assess study progress and feasibility.

Application Due Date: July 14, 2010

Potential applicants should contact Dr. Scott Janis, clinical research project manager, Office of Clinical Research, NINDS, at 301-496-9135 or sj151t@nih.gov. For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-10-198.html>.

CounterACT

NINDS encourages applications for countermeasures against chemical threats (CounterACT) cooperative research projects and centers of excellence. This announcement is made together with 6 other NIH components and is supported by 2 funding mechanisms: U01 and U54.

Chemical threats could cause mass casualties after being released by a terrorist attack, an industrial accident, or a natural disaster. The purpose of this announcement is to support the development of therapeutics that effectively can treat individuals during a chemical emergency event.

Potential applicants should contact Dr. David Jett, program director, Office of Translational Research, NINDS, at 301-496-6035 or dj140o@nih.gov. For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-10-180.html> or <http://grants.nih.gov/grants/guide/pa-files/PA-10-181.html>.^{..v}

Deep Brain Stimulation

NINDS invites applications from small businesses to design and develop advanced tools and technologies for deep brain stimulation (DBS). This announcement is made together with 4 other NIH components and is supported by 2 funding mechanisms: R41/R42 and R43/R44.

DBS is used to treat the debilitating symptoms of motor disorders, including Parkinson's disease and essential tremor. It may offer relief of symptoms in other disorders such as dystonia, Tourette syndrome, and epilepsy. In spite of its clinical success, DBS still has several limitations. The tools and technology produced by this announcement will permit enhanced targeting and delivery of therapeutic stimulation in the brain, ultimately improving the quality of life for DBS patients.

Potential applicants should contact Stephanie Fertig, program analyst, Repair and Plasticity Cluster, NINDS, at 301-451-4669 or sf260n@nih.gov. For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-10-175.html> or <http://grants.nih.gov/grants/guide/pa-files/PA-10-176.html>.^{..v}

Cooperative Program in Translational Research for Resistant Epilepsy and Epileptogenesis

NINDS encourages grant applications for the Cooperative Program in Translational Research for resistant epilepsy and epileptogenesis.

Epilepsy, one of the most common neurological disorders affecting both American and international populations, is a significant public health burden. For some seizures can be controlled by available therapies; however, for others difficult side effects and conditions continue to affect quality of life. This announcement supports milestone-driven projects focusing on the preclinical development of new therapies to cure epilepsy, prevent the emergence of epilepsy following brain injury or in other high-risk groups, or to better treat individuals with intractable epilepsy.

Potential applicants should contact Dr. Randall Stewart, program director, Channels, Synapses and Circuits Cluster, NINDS, at 301-496-1917 or rs416y@nih.gov. For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-10-144.html>.^{..v}

EUREKA in the Epilepsies

NINDS requests applications for exceptional, unconventional research enabling knowledge acceleration (EUREKA) in the epilepsies.

Epilepsy is one of the most common neurological disorders affecting both American and international populations. It involves disruption of basic neurobiological functions at all levels, including cellular/molecular biology and genetics, cognitive/behavioral and systems neuroscience, neuroplasticity, and neurodevelopment. This funding opportunity supports research to test novel, unconventional hypotheses or pursue major methodological or technical challenges. The potential impact of the proposed research on the epilepsy community must be substantial.

Letters of Intent Due Date: July 13, 2010

Application Due Date: August 13, 2010

Potential applicants should contact Dr. Brandy Fureman, program director, Channels, Synapses and Circuits Cluster, NINDS, at 301-496-1917 or furemanb@mail.nih.gov; or Dr. Randall Stewart, program director, Channels, Synapses and Circuits Cluster, NINDS, at 301-496-1917 or rs416y@nih.gov. For more information visit <http://grants.nih.gov/grants/guide/rfa-files/RFA-NS-11-003.html>.^{..v}

Exploratory/Developmental Projects in Translational Research for Resistant Epilepsy and Epileptogenesis

NINDS invites grant applications for exploratory or developmental projects in translational research for resistant epilepsy and epileptogenesis.

Epilepsy is one of the most common neurological disorders and is a significant public health burden. Seizures can be controlled by available therapies for about two-thirds of people with epilepsy, but difficult side effects and conditions continue to affect quality of life for many. NINDS recognizes the need to encourage innovative research approaches to move toward real cures for epilepsy—defined as “no seizures, no side effects, and prevention in those at risk.” This announcement encourages projects that will complete preliminary steps for the pre-clinical development of therapeutics.

Potential applicants should contact Dr. Randall Stewart, program director, Channels, Synapses and Circuits Cluster, NINDS, at 301-496-1917 or rs416y@nih.gov. For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-10-143.html>.^{NN}

Huntington's Disease

NINDS encourages grant applications to validate novel therapeutic targets for Huntington's disease. This announcement is made together with the CHDI Foundation, Inc.

Huntington's disease is an inherited neurodegenerative disorder characterized by cognitive and memory impairments, heightened irritability, depression, weight loss, and choreic motor abnormalities. Roughly 120,000 Americans carry the expanded CAG repeat sequence in the *huntingtin* gene that causes this fatal disease. A well-characterized understanding of the biological basis for Huntington's disease pathophysiology is necessary to accelerate the development of disease-modifying treatments.

Application Due Date: February 5, 2011

Potential applicants should contact Dr. Margaret Sutherland, program director, Neurodegeneration Cluster, NINDS, at 301-496-5680; email: or sutherlandm@mail.nih.gov. For more information visit <http://grants.nih.gov/grants/guide/pa-files/PAS-10-183.html>.^{NN}

International Neuroscience Fellowships

NINDS invites applications for international neuroscience fellowships. This announcement is made together with 7 other NIH components.

The purpose of the fellowship is to advance the training of qualified foreign neuroscientists and clinicians at the early or mid-career level by enhancing their basic, translational, or clinical research skills in a research setting in the United States. The fellowships prepare awardees for independent careers in academia, research, or clinical institutions in their home country. The broader goals of the program are to strengthen neuroscience research in foreign institutions (particularly those with limited economic resources), enhance the quality and quantity of international neuroscience research, and foster long-lasting collaborations between foreign and US neuroscientists.

Letters of Intent Due Date: July 16, 2010

Application Due Date: August 16, 2010

Potential applicants should contact Dr. Yuan Liu, chief, Office of International Activities, NINDS, at 301-496-0012 or yl5o@nih.gov. For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-10-167.html>.^{NN}

National Research Service Awards for Individual Predoctoral Fellows

NINDS encourages applications for Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellows. This announcement is made together with 7 other NIH components.

The predoctoral fellowship award provides support for promising doctoral candidates who will be performing dissertation research and training in scientific health-related fields relevant to the missions of the participating NIH Institutes. Specifically, the award provides up to 5 years of support for research training which leads to the PhD or equivalent research degree, the combined MD/PhD degree, or another formally combined professional degree and research doctoral degree in the biomedical, behavioral, or clinical sciences.

Potential applicants should contact Dr. Stephen Korn, director, Training and Career Development, NINDS, at 301-496-4188 or korns@ninds.nih.gov. For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-10-108.html>.^{NN}

National Research Service Awards for Individual Predoctoral Fellowships to Promote Diversity in Health-Related Research

NINDS invites applications for Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellowships to Promote Diversity in Health-Related Research. This announcement is made together with 20 other NIH components.

The purpose of the fellowship is to improve the diversity of the health-related research workforce by supporting the training of predoctoral students from underrepresented groups including racial and ethnic groups, individuals with disabilities, and individuals from disadvantaged backgrounds. The fellowship provides up to 5 years of support for research training leading to the PhD or equivalent research degree, the combined MD/PhD degree, or another formally combined professional degree and research doctoral degree in biomedical, behavioral, health services, or clinical sciences. The overall goal is to help ensure that a diverse pool of highly trained scientists is available to address the Nation's biomedical, behavioral, and clinical research needs.

Potential applicants should contact Dr. Michelle Jones-London, program director, Office of Minority Health and Research, NINDS, at 301-451-7966 or jonesmiche@ninds.nih.gov. For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-10-109.html>.^{NN}

National Research Service Awards for Individual Postdoctoral Fellows

NINDS encourages applications for Ruth L. Kirschstein National Research Search Awards for Individual Postdoctoral Fellows. This announcement is made together with 20 other NIH components.

The award supports promising postdoctoral applicants who have the potential to become productive and successful independent research investigators. The proposed postdoctoral training must offer an opportunity to enhance the applicant's understanding of the health-related sciences, and must be within the broad scope of biomedical, behavioral, or clinical research or other specific disciplines relevant to the research missions of the participating NIH Institutes and Centers.

Potential applicants should contact Dr. Stephen Korn, director, Training and Career Development, NINDS, at 301-496-4188 or korns@ninds.nih.gov. For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-10-110.html>.^{NN}

National Research Service Awards for Individual Senior Fellows

NINDS invites applications for Ruth L. Kirschstein National Research Service Awards for Individual Senior Fellows. This announcement is made together with 14 other NIH components.

The individual senior fellow awards are for experienced scientists who wish to make major changes in their research careers or who wish to broaden their scientific background by acquiring new research capabilities as independent investigators in research fields relevant to the NIH mission. These awards enable individuals to take time from their regular professional responsibilities to receive training to increase their scientific capabilities.

Potential applicants should contact Dr. Stephen Korn, director, Training and Career Development, NINDS, at 301-496-4188 at korns@ninds.nih.gov. For more information visit <http://grants.nih.gov/grants/guide/pa-files/PA-10-111.html>.^{NN}